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- Summit Glove
- Udder Tech, Inc.
- United Farmers Coop
- Unity Bank
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- Zoske’s Sales & Service Inc.
10:30 a.m. Insights & Solutions with Ag Plastics & Recycling
» Brita Sailer, Recycling Association of Minnesota Executive Director
» Anne Morse, Winona County Recycling Coordinator
» John Bronk, Dairy Farmer (Retired)
Recycling, disposal and management of waste agricultural film plastics (bale wrap, bunker covers, silage bags, etc.) and other recycling materials can create some challenges. This comprehensive session will focus on the rationale, barriers and opportunities from a dairy farmer, county and state perspective.

11:30 a.m. Ideas to Make a Profit with Current Challenging Prices
» Tim Swenson, AgStar
Helping develop a deeper understanding of which metrics can have the greatest impact in today's economic environment and how they can drive your operations profitability. There are various ways to improve margins on your dairy, even during these challenging milk prices.

12:30 p.m. Hot Lunch & Networking

1:15 p.m. Minnesota Milk Legislative Update
» Bob Lefebvre, Minnesota Milk Executive Director

1:30 p.m. Dairy, Beef and Grain Situation and Outlook for 2016
» Dr. Marin Bozic, University of Minnesota
In this talk, Dr. Bozic will review factors driving the dairy, livestock and grain markets in the U.S. In-depth review of the dynamics in the dairy sector in Minnesota will focus on recent changes in milk price basis and the situation in dairy processing capacity. The session will conclude by offering suggestions for efficiency improvements and risk management opportunities in the forthcoming 12-24 months.

2:30 p.m. Milk Break and Conclusion
**Perham Schedule of Events**

10:30 a.m. **Insights & Solutions with Ag Plastics & Recycling**
- Brita Sailer, Recycling Association of Minnesota Exe. Director
- Sandy Gunderson, Becker County Solid Waste/Recycling
- Zach Fjestad, Ottertail County Solid Waste
- Mark & Kristine Spadgenske, Becker County Dairy Farmers

Recycling, disposal and management of waste agricultural film plastics (bale wrap, bunker covers, silage bags, etc.) and other recycling materials can create some challenges. This comprehensive session will focus on the rationale, barriers and opportunities from a dairy farmer, county and state perspective.

11:30 a.m. **It’s About the Sales!**
- Ken Herbranson, Brookside Dairy, Midwest Dairy District 4 Director
- Kristine Spadgenske, Spadgenske Dairy, Midwest Dairy District 3 Director
- Barb Luehmann, Midwest Dairy

Domestic dairy sales have been a bright spot in the current dairy situation, and efforts by the checkoff have played a key role. Learn how that’s happened, and why whole milk sales are trending upward these days. Your Midwest Dairy staff and board members will entertain questions about the important investment your business has made in building trust and sales for dairy.

12:30 p.m. **Hot Lunch, Networking, and Individual County Meetings**

1:15 p.m. **Minnesota Milk Legislative Update**
- Bob Lefebvre, Minnesota Milk Executive Director

1:30 p.m. **Dairy, Beef and Grain Situation and Outlook for 2016**
- Dr. Marin Bozic, University of Minnesota

In this talk, Dr. Bozic will review factors driving the dairy, livestock and grain markets in the U.S. In-depth review of the dynamics in the dairy sector in Minnesota will focus on recent changes in milk price basis and the situation in dairy processing capacity. The session will conclude by offering suggestions for efficiency improvements and risk management opportunities in the forthcoming 12-24 months.

2:30 p.m. **Milk Break and Conclusion**
**Hutchinson Schedule of Events**

10:30 a.m. **Insights & Solutions with Ag Plastics & Recycling**
- Al Christensen, Tri County Solid Waste (Sibley, Nicolette, and Le Suer) Administrator
- Renee Burman, Rural Solid Waste Commission-Dakota County
- Don Hopp, McLeod County Recycling Facility Recycling Manager
- Paul Wright, McLeod County Farmer and County Commissioner

Recycling, disposal and management of waste agricultural film plastics (bale wrap, bunker covers, silage bags, etc.) and other recycling materials can create some challenges. This comprehensive session will focus on the rationale, barriers and opportunities from a dairy farmer, county and state perspective.

11:30 a.m. **It’s About the Sales!**
- Kevin Buss, Kev-Lor Farm, Midwest Dairy District 13 Director
- Charles Krause, Krause Holsteins Inc, Midwest Dairy District 12 Director
- Barb Luehmann, Midwest Dairy

Domestic dairy sales have been a bright spot in the current dairy situation, and efforts by the checkoff have played a key role. Learn how that’s happened, and why whole milk sales are trending upward these days. Your Midwest Dairy staff and board members will entertain questions about the important investment your business has made in building trust and sales for dairy.

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2:30 p.m. **Milk Break and Conclusion**
Ag Bag / Waste Plastic Recycling Program

Got Plastic?

WELCOME

MN Milk
Dairy Management Workshop
February 18th, 2016

Putting the puzzle together

ToGETHER – get it!

Why do it?

Reality check #1 - Current household recycling programs are 20 years mature and still need Subsidy support

# 2 - Recycling markets in the tank

# 3 - Current price of oil is $33.00 a barrel

Why do it?

To change the current methods of disposal / old habits / behavior

It’s a lost opportunity and is a valuable resource that should be recaptured

Save on landfill space AND Increase your County Recycling Rate

It’s the right thing to do – Best Management Practices (BMPs) or similar to the Canadian Clean Farms Initiative

Ag plastic materials are made from Polypropylene, Polyethylene & Polyurethane (petroleum products). They should be burned ONLY in an environmentally sound manner - Waste to Energy Facility

Plastics burned at low temperatures produce - really BAD STUFF

Dioxins (carcinogens), Toxic gases such as hydrogen cyanide & hydrogen chloride

Free Press

Ag plastic materials are made from Polypropylene, Polyethylene & Polyurethane (petroleum products). They should be burned ONLY in an environmentally sound manner - Waste to Energy Facility

Plastics burned at low temperatures produce - really BAD STUFF

Dioxins (carcinogens), Toxic gases such as hydrogen cyanide & hydrogen chloride
Sibley County started its Ag Bag program in 2007—now in its 10th Year!

Sibley County’s program is funded by an $18 Special Assessment SW Fee / Tax

Materials are collected during the months of April, May, September & October

Sibley County has 3 collection locations—Coops in Arlington, Gibbon & Gaylord

Nicollet & Le Sueur Counties have started programs in 2015 with 3 collection locations in Nicollet County and 1 in Le Sueur County

Materials collected have been recycled the last 3 years

Currently—NO FEE is charged to the Feedlot Operations

Materials Collected

Ag Bag / Silage Bags—Polyethylene

Large Manufacturer right here in Cottage Grove, MN - Genuine Ag-Bag

Hay Bale Netting—Polyethylene

Large Manufacturer in Ontario, Canada - Syfilco

Great Lakes Polymer, Albert Lea, MN

Hay Bale Stretch Wrap—Polyurethane

Most TOXIC to burn!!

Super Sacks—Polypropylene

100% recyclable / re-useable
Currently is most / high value of Ag waste materials

LOGISTICS—How to?
Collect, separate? where to collect?
Transport to where? Storage capacity?
Do they have to reprocess & handle?

COSTS—to advertise, to educate, pull fees, to process, grind, bale & ship

End markets—where?
Price of oil
Price for plastics
Scale of economies?

BIO SECURITY!!!
Ball Park Numbers

Minnesota ranks 7th in total Dairy Cows – 460,000
Wisconsin by comparison is ranked 2nd – having 1.2 million Cows

Minnesota has approximately 21.4 million tillable acres
1 Paper Seed bag (41 to 46 lbs.) – plants ~ 2 acres
~ 15% of tillable farm land is planted by seed bags
3,210,000 acres / 2 = 1.6 MILLION BAGS used per year!!

Estimates from VT, WI and Canada average 15 lbs. of plastic per cow / per year
That’s 6.9 Million pounds of plastic used per year in Minnesota.

Success Stories

McLeod County & RotoChopper Test Grind – 10,000 pounds

IT WORKED!!!

Evolution - what may happen

Absolutely Nothing?? – in some cases – due to costs & other barriers
Some Counties may get a great program started and keep the materials in house (at County owned recycling center) and find their own end markets
Other Counties may band together, achieve economies of scale and overcome the logistics issues
Some County Boards will choose to work with their Farming Operations and recognize a need for infrastructure
Processing efficiencies will improve to overcome processing challenges – costs should go down – ROTOCHOPPER & others...
Farming Operations will become more educated – working with local County Staff, Extension Agents and Coops to provide cleaner material – maybe even separate it?

Moving Forward

Usual Stuff - Prepare, Plan, Educate & Execute
Meet with Feedlot Operators / work together!!!
Make your Feedlot Officer & Extension Agent your new BFF – donuts anyone?
Assess what’s out there for materials – Ag bag, bail netting or wrap & how much
Do a Phone-A-thon with your Feedlot Operations to get an accurate assessment of what is out there and test the level interest – what do they have, how far, current method of disposal?
Do you have any local Coops that will work with you?
Consider making the local FSA, SWCD’s, FAA & 4H folks to be part of your Team and help EDUCATE!

Acknowledgements

Tri County Commissioners – Sibley, Le Sueur & Nicollet
Jeff Majeski – Sibley County Environmental Services Director
McLeod County Staff – Don Hopp & Sarah Young
Recycling Association of Minnesota – Brita Sailer
MN Dept. of Ag – Curt Zimmerman
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**RAM /Stakeholder Activities Timeline**

### 2014

March: RAM holds Initial Stakeholders Forum in St Cloud (Canada’s Clean Farms, Terrecon Co., Aquapoly /Erema)

*Spring/ Summer:* Stakeholders meetings continue

**Fall RAM/SWANA Conference:** Ag plastic sessions at the Pre-Conference and in the Markets session

### 2015

*Spring /Summer:* Begin Ag Plastic recycling pilot projects with Tri-County (Al Christensen) and Dakota County- Rural Solid Waste Commission (Renee Burman)

**Fall RAM SWANA Conference:** Pilot project presentations, Exhibitors- Delta Plastics

October: Confirmed market with McLeod Co. Strong interest from Republic Services, and Choice Plastics

November: With markets confirmed, moved ahead with program establishment. Held a very well attended stakeholder meeting in Waite Park with County Commissioners, solid waste/recycling administrators; farmers and farm organizations; industry recyclers and suppliers in person and on phone.

Immediate Results:

- Haubenschild Farms connected with McLeod County, who then picked up 26,000# ag bags from the farm.
- A High-Tunnel Vegetable Farmer with plastic from 115 500’x30’ hoop houses connected with McLeod Co. who has collected 1 truckload so far, more to come.
- I-94 corridor group formed to set up boat wrap collection system for coming spring

December: RAM had a booth on Ag Plastic at the Minnesota Farmers Union annual convention.

### 2016


January 27: Meeting at McLeod County to present the situation and needs to MDA Commissioner Fredrickson, PCA Asst. Commissioner Koudelka, Congressman Colin Peterson’s office, County Commissioners, agricultural organization leaders and others.

January 29: Presented overview of Ag Plastic/Boat Wrap project to the Solid Waste Administrators Assoc. of MN at their winter training meeting in St. Cloud

February 16, 17, 18: Minnesota Milk Dairy Workshops in Rochester, Perham and Hutchinson.
$16 Milk; Ideas to make a profit with current prices

Tim Swenson
Sr. Dairy Business Consultant
Initial thoughts:

- Are you reducing expenses for the right reasons?
- Do you truly understand your purchasing style?
- What is the long term impact of reducing expenses today?

Producers must understand your business enough to make independent choices on expense reduction, revenue growth and your future...

there is not one set answer.

Goal Alignment

BUSINESS

FAMILY

Self

Short term cash decisions could affect our operations and industry for many years to come.
The easy answer: Milk

- Milk shipped vs. milk produced
- Increase percent saleable milk
- Quality / SCC
- Components
Ideas to Make a Profit with Current Challenging Prices - Tim Swenson - AgStar

Feed Cost
- Understand Income Over Feed Cost (IOFC)
- Make forage quality a priority
- Feed inventories
- Manage bunkers to reduce shrink

Feed Cost
- Reduce feed refusal
- Consider production grouping strategy
- Critically review discretionary ingredients
- Profit maximizing rations vs. least cost rations

Feed Cost

If you are making a change to feed costs, what is the maximum change in milk production you can have without decreasing IOFC?

Reductions of feed expense can not result in decreased energy corrected milk production

Labor costs
- Understand work output vs. wage
- Maximize output per shift
- Leverage talents of current employees
- Employee turnover drains efficiencies
- Employee attrition can provide opportunities

Cost of Production
+ Feed Cost
+ Labor Cost
+ Replacement Cost
   - Less Cull Revenue
+ Capital Cost
+ Other Production Cost
+ Overhead Cost
   - Less Other Income

Whole Farm: $/cwt

Cost of Production
+ Feed Cost
+ Labor Cost
+ Replacement Cost
   - Less Cull Revenue
+ Capital Cost
+ Other Production Cost
+ Overhead Cost
   - Less Other Income

Whole Farm: $/cwt

Value of animals leaving herd – Dead or Culled

Other Revenue Opportunities
- Timber / Non-productive land?
- Excess Feed Inventory?
- Excess Heifers?
- Other Livestock – Steers?
- Killer Toys?

Cash Flow Breakeven
+ Expense Rate
+ Labor Cost
+ Term P&I
+ Capital Expenditures

$/cwt.

Cash

Cost of Production

Whole Farm: $/cwt

Balance Sheet

+ Assets
- Liabilities
= Equity

+ Feed Cost
+ Labor Cost
+ Replacement Cost
- Less Cull Revenue
+ Capital Cost
+ Other Production Cost
+ Overhead Cost
- Less Other Income

Whole Farm: $/cwt
Herd Replacement Rate

Make management choices that reduce replacement rate
- Manage number of animals that leave early lactation
- Cull at appropriate times
- Identify sources that result in cow removal

Cost of Production

+ Feed Cost
+ Labor Cost
+ Replacement Cost
  - Less Cull Revenue
+ Capital Cost
  + Other Production Cost
  + Overhead Cost
  - Less Other Income

Whole Farm: $/cwt

Disciplined Approach to Capital

• Are we maximizing the efficiencies of our operation?
  • Parlor
  • Facilities
  • Machinery
    • Hitch Pin Syndrome
    • New Paint Syndrome
    • Killer Toys

Cost of Production

+ Feed Cost
+ Labor Cost
+ Replacement Cost
  - Less Cull Revenue
+ Capital Cost
  + Other Production Cost
  + Overhead Cost
  - Less Other Income

Whole Farm: $/cwt

Other Production Costs – Animal Health

• Hoof Trimming
• Vaccines
• Fresh Cow Protocols

Other Production Costs - Supplies

• Adjust inventories to the current environment
  • Regardless of the inventory understand the impact to your operation’s cash flow.

• Monitor quantities “closer to usage” vs. “purchasing for a deal”
**Cost of Production**

- Feed Cost
- Labor Cost
- Replacement Cost
  - Less Cull Revenue
- Capital Cost
- Other Production Cost
**Overhead Cost**
  - Less Other Income

Whole Farm: $ /cwt

**Overhead Costs - Repairs**

- Identify repairs due to incorrect actions as opposed to normal repair
- When new is cheaper: quantify costs of repairing equipment vs. purchasing new
  - Down-time for repairs
  - Employee loss of productivity
  - Cost of parts

**Cash Flow Breakeven**

- Expense Rate
- Labor Cost
- Term P&I
+ Capital Expenditures (Cash)

$ /cwt. - Cash

**Term P & I**

- Debt structure which allows for adequate:
  - Working Capital
  - Cash Flow
  - Repayment Capacity
Term P & I

- Convert carryover from previous year’s operating notes to term debt
- Make sure term debt is amortized over useful life of corresponding asset
- Consider deferring principle payments (interest only) on term debts

Cash Flow Breakeven

+ Expense Rate  
+ Labor Cost  
+ Term P&I  
+ Capital Expenditures (Cash)

$/cwt. - Cash

Capital Expenditures

- Balance repairs with replacement
- Avoid new paint syndrome
- Avoid hitch pin syndrome

Where do we go from here?

- Keep the long range vision of your operation and the industry top of mind
- Build and preserve working capital
- Continually evaluate your operations
  - Budgeting
  - Monitoring
  - Benchmarking
  - Sensitivity analysis

Where do we go from here?

- Focus on four key areas you can control
  - Feed Costs
  - Labor efficiency
  - Herd Replacement Rate
  - Debt Structure

Where do we go from here?

- Align goals, create a common vision
- Don’t cut corners or underestimate value
- Make independent decisions
- Recognize impact choices have on the future
REMEMBER:
The cows don’t know whether milk price is $14 or $24… make certain they are treated like the queens they are!
**Our Focus**

“Building Trust and Sales for Dairy Products and Dairy Farmers”

---

**Commercial Disappearance Exceeds Production**

Milk Production vs. Total Commercial Disappearance (Lbs.)

- **Milk Production**
- **Total Commercial Disappearance**

**Source:** USDA NASS – Milk Production, USDA ERS – Commercial Disappearance

**2014 YTD (Sep)**

- **Milk Production:** 155,090 MM lbs. +1.4%
- **Commercial Disappearance:** 156,098 MM lbs. +1.1%

**2015 YTD (Sep)**

- **Milk Production:** 157,257 MM lbs.
- **Commercial Disappearance:** 157,812 MM lbs.

**Total Dairy Consumption Has Increased Over Time**

- All Dairy Products – Per Capita Consumption (Lbs.)

**Source:** USDA ERS – Dairy products: Per capita consumption – 1975-2014

- 2014 data is preliminary

---

**Where Have Exports Gone?**


- **EU Prices Stronger due to robust butter and cheese demand**
- **Recent farm-gate milk prices in NZ and EU resemble 2009.**
Incremental Milk Pounds: 2015 YTD (Sep) vs. YA

<table>
<thead>
<tr>
<th>Source: USDEC, USDA ERS, USDA NASS and USDA AMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Exports</td>
</tr>
<tr>
<td>(2,070)</td>
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</table>

% Change vs. YA

-8.4% +2.8% -0.7% -1.5%

Checkoff’s Domestic Sales Efforts

- Partnerships
- Fuel Up to Play 60 & School Breakfast
- Fluid Reinvention
- Milkfat is Back!
- Consumer Confidence

Partnerships Paying Dividends

- 4 Billion pounds milk equivalent

McDonald’s Goes Dairy Crazy!

- On-site food scientists influence menus
- Butter used exclusively
- All-day breakfast builds cheese sales
- Mozzarella sticks introduced in 2015
Fuel Up to Play 60

- Society says...
  - 75% eating/drinking more dairy at school
  - 86% eating/drinking more dairy at home

  AND

- 71% learning more benefits of dairy and farm foods in my area
- 64% learning about the work of dairy farmers in producing healthy foods

School Breakfast Impact

- A milk is offered with every school breakfast served; often cheese or yogurt, too
- Worked with 100 schools in our region to serve more school breakfast, smoothies & coffee bars

Reinventing Fluid Milk

- Eight companies involved
- Coke/Select Fairlife milk seeing success
- New DFA product – Live Real Farms mixes juice & milk
- Catalytic effect has begun

Milkfat is Back!

Natural unprocessed fats are healthy and key to the evolution of a society that focuses on developing healthy individuals, not just treating those who are sick. Welcome to the new world of fat.

-Credit: Niles Research Institute

Waxie, the new health
Consumer Confidence

Your Money is Not Alone!

For Every $1 You Invest, Partners Invest at Least $10!

WIN!
YOUR CHECKOFF INVESTMENT AT WORK

Your local, national and export checkoff promotion organizations are working together to move more milk.

MILKFAT IS BACK

- Decades of checkoff-led milkfat research and building relationships with health professional organizations have changed the thinking around dairy fat.
- Your checkoff scientists kept at a long-term strategy of doing the research and sharing it with other health and wellness experts, gaining momentum and dairy advocates as the science evolved.
- Those groups gave the checkoff and the fat research added credibility by talking up the value of dairy and wrapping themselves around us...and a long-term strategy paid off when TIME magazine’s cover read, “Eat Butter” in June of 2014.

YOUR DAIRY CHECKOFF DID THAT.

BUTTER IS BETTER

- This year, McDonald’s announced a switch from margarine to butter in their 14,000+ stores, which means 600 million additional pounds of milk equivalent annually. McDonald’s was able to make the change because our research and health professional partnerships created a friendlier atmosphere for dietary fat.
- Our partnership with McDonald’s includes food scientists, who are your checkoff employees, who sit at McDonald’s offices. One of those scientists played a key role in the change to butter:
  - Developing product specs
  - Working with franchisees to conduct tests
  - Training crews
  - Selling the product in to senior leaders of the organization
- If you’ve eaten anything at McDonald’s with dairy on it in the last few years, one of your checkoff employees helped create it.
- McDonald’s is spending their own money to advertise butter and the Real Seal. We’ll see even more dairy move through other restaurant chains when they follow McDonald’s lead, which happens often.

YOUR DAIRY CHECKOFF DID THAT.
DOMESTIC CHEESE SALES CARRY THE DAY

- The checkoff’s cheese work in pizza and foodservice has helped move 4 billion incremental pounds of milk from January of 2014 to July of 2015. Domestic cheese has been the strength of overall dairy sales ever since we started working with category leaders to make wholesale change.

- Our partnerships with Domino’s, Pizza Hut, Taco Bell and others has brought about new cheesy items and improved existing items by adding more cheese, responding to consumer demand.

- These partnerships also include on-site checkoff dairy scientists and marketers who take our partners through the process from creation to marketing, moving more cheese to more people in restaurants across the country and around the world.

YOUR DAIRY CHECKOFF DID THAT.

DID YOU KNOW?

- Since the checkoff’s landmark “Fuel Up to Play 60” in-school program went national, 2.3 million additional kids are now eating school breakfast each day, and in the last school year, this meant an increase of nearly 200 million pounds of fluid milk, plus more yogurt and cheese. That’s just in schools, and it helps keep children as lifelong dairy consumers, and keeps dairy in school meals.

- An estimated $500 million in infrastructure improvements and innovation in fluid milk is being invested by co-ops, processors and retailers, as a result of checkoff leadership, to help turn around decades of declines.

- The U.S. Dairy Export Council and its 120+ member companies have helped grow dairy export volume by an average of 8% per year since 2009. That translates to an incremental 12 billion pounds of milk equivalent moved internationally since 2009.

- The checkoff’s “Udder Truth” and “Acres & Avenues” video and social media campaigns put farmers front and center, dispelling common dairy myths and connecting farmers with consumers. So far, 1.3 million people chose to watch our videos, and they are talking online and defending farmers when extremists try to attack.

YOUR DAIRY CHECKOFF DID THAT.

Check out how we’re sharing your story at www.dairygood.org
Market Outlook for 2016 (and beyond)

Marin Bozic
Foley, MN, February 4, 2016

**UNIVERSITY OF MINNESOTA**
*Driven to Discover*

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**Total Solids Exported as % of US Production**

12-month Moving Average

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**Growth of U.S. Exports / US Milk Production Growth**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Solids</th>
<th>Milkfat</th>
<th>Nonfat Solids</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-2013</td>
<td>64%</td>
<td>27%</td>
<td>80%</td>
</tr>
<tr>
<td>2007-2013</td>
<td>73%</td>
<td>36%</td>
<td>90%</td>
</tr>
<tr>
<td>2009-2014</td>
<td>74%</td>
<td>37%</td>
<td>91%</td>
</tr>
<tr>
<td>Jan-Nov 2015</td>
<td>-97%</td>
<td>-137%</td>
<td>-78%</td>
</tr>
</tbody>
</table>

U.S. exports 'only' cca 15% of total milk solids, but exports have been absorbing most of the growth of U.S. milk production over the past decade. In 2015, decline in exports acted as if the U.S. milk production growth was twice as strong as it was – depressing domestic prices.

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**China slowly working through the milk powders inventory**

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**US Milk Solids Exported**

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But Did You Ever Milk a Cow?
**U.S. vs. International Prices: Cheese**

![Chart showing U.S. vs. International Prices: Cheese](chart1.png)

**U.S. vs. International Prices: Whey**

![Chart showing U.S. vs. International Prices: Whey](chart2.png)

**U.S. vs. International Prices: Butter**

![Chart showing U.S. vs. International Prices: Butter](chart3.png)

**Dollar Index of Major Currencies**

![Chart showing Dollar Index of Major Currencies](chart4.png)

**U.S. Exports as % of Production**

<table>
<thead>
<tr>
<th></th>
<th>November Year Ago</th>
<th>Jan Nov ’15 Year Ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFDM</td>
<td>55.0%</td>
<td>51.0%</td>
</tr>
<tr>
<td>Total Cheese</td>
<td>5.2%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Butterfat</td>
<td>1.6%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Dry Sweet Whey</td>
<td>32.0%</td>
<td>51.0%</td>
</tr>
<tr>
<td>Lactose</td>
<td>83.0%</td>
<td>67.0%</td>
</tr>
<tr>
<td>Total Milk Solids</td>
<td>12.7%</td>
<td>14.0%</td>
</tr>
</tbody>
</table>

**Year-on-Year Change in U.S. Milk Production**

![Chart showing Year-on-Year Change in U.S. Milk Production](chart5.png)
Year-on-Year Change in U.S. Dairy Herd

World Milk Production Snapshot

Milk Production Growth, Top 20 States Dec 2015.

CA Drought Situation Improving

Will El Nino Break the California Drought?

Notes to Marin

October 6th, 2015

January 26th, 2015
Feed is Cheap Again...

Feed Cost Per CWT Milk Produced

Percent of Milk Production by MPP-Dairy Coverage Level 2015 vs. 2016 Signup

Dairy Margins 2015: Forecast vs Actual

Forecasted Dairy Margins 2016

Source: DMI Monthly Sales and Insights Report, December 2015
Feed is Cheap Again...

Feed Cost Per CWT Milk Produced

Percent of Milk Production by MPP-Dairy Coverage Level
2015 vs. 2016 Signup

Percent of Milk Production by MPP-Dairy Coverage Level
2015 vs. 2016 Signup

Dairy Margins 2015: Forecast vs Actual

Forecasted Dairy Margins 2016

Forecasted Dairy Margins 2016

Source: DMI Monthly Sales and Insights Report, December 2015
Consumer Confidence: Future Expectations Below Present

Global Dairy Trade Auction Results, February 3, 2016

Incremental Milk Pounds

Minnesota Dairy Herds by Size: 2003 vs. 2016

Minnesota Dairy Farm Numbers – The Next 15 Years

2010-2014 Cost of Milk Production, by Herd Size ($/cwt)
From 2010 to 2015, MN cheese plant capacity increased from 6.1 to 7.3 billion lbs/yr, but capacity utilization went up from 93.1% to 96.2%. Essentially, our cheese plants are full.

Over the same period, non-cheese plant utilization decreased below 65% due to declining demand for fluid milk and an increase in unutilized condensing capacity.

As South Dakota and Wisconsin increased their own production faster than their processing capacity, the proportion of Minnesota’s milk processed outside Minnesota borders shrunk from 16.2% down to 7.5%.

Consequently, recent decline in milk price basis is at least partially going to persist over the next several years.
### Sales Growth vs. Midwest Dairy Assoc. Area Supply Growth

<table>
<thead>
<tr>
<th></th>
<th>Conservative</th>
<th>Optimistic</th>
<th>Realistic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2015-2025 Domestic Growth Opportunity (mil lbs/year)</strong></td>
<td>+81</td>
<td>+14</td>
<td>+352</td>
</tr>
<tr>
<td><strong>MDA Growth (at 50% of Opportunity)</strong></td>
<td>+40</td>
<td>+257</td>
<td>+176</td>
</tr>
<tr>
<td><strong>Milk Absorbed (x 10)</strong></td>
<td>+400 mil lbs</td>
<td>+2.57 bil lbs</td>
<td>+1.76 bil lbs</td>
</tr>
<tr>
<td><strong>Mil lbs Milk/Day</strong></td>
<td>1.1 mil lbs/day</td>
<td>7.35 mil lbs/day</td>
<td>5 mil lbs/day</td>
</tr>
<tr>
<td><strong>MDA Milk Production Growth 2025 at 1.5% annual growth</strong></td>
<td>+3.73 bil lbs</td>
<td>+3.73 bil lbs</td>
<td>+3.73 bil lbs</td>
</tr>
</tbody>
</table>
Building a Climate for the Next Generation of Dairy Farmers to Grow and Prosper

All legislative priorities build a business climate conducive for dairy growth and prosperity, with a special emphasis on the next generation of dairy farmers. A growing and prosperous dairy industry is good for our economy, local communities, crop farmers, and the environment.

Farm Transitions & Beginning Farmers/ Tax Relief
Trans-generational and beginning farmers rejuvenate and reinvest into Minnesota’s dairy farms and its infrastructure.

- We support tax reform to help transition farms to the next generation/ beginning dairy farmers.
- We support legislation to bring Minnesota’s inheritance tax threshold equal to the federal threshold.
- We support legislation to bring Minnesota’s depreciation schedules in-line with Federal Schedules (Section 179).

Environmental Regulatory Reform
Dairy farmers are committed to socially responsible, economically viable, and environmentally sound practices on Minnesota farms. Facts support the dairy sector’s positive impact on the environment.

- We support a Federal, State, county and township level permitting and environment review process that provides farmers with clarity, consistency and timeliness.
- We support 2015 changes to the Pollution Control Agency Citizens’ Review Board that did not diminish opportunity for public input on proposed projects nor reduce environmental standards of compliance by dairy farms.

Strengthening Minnesota’s Processing Sector
Growth and prosperity of the dairy industry is important to the State of Minnesota economically, socially and environmentally. Continued growth and advancement of Minnesota’s processing sector provides for strategic growth for making Minnesota a more profitable state for dairy. Insufficient processing and capacity inhibits growth in Minnesota.

- We support direct incentives to encourage further innovation and increased milk processing capacity to add value to Minnesota produced milk.

Infrastructure Needs of Rural Communities
A vibrant, diverse, and growing dairy industry is vital to dairy farmer sustainability. Local infrastructure needs such as roads, bridges, utilities, water supply, wastewater facilities and broadband affect the ability of milk processors to remain competitive.

- We support a bonding request for roads and bridges.
- We support changes to truck weight restrictions.
- We support for example the City of Litchfield’s bonding request of $5 million for power generators that would help the community partner with First District Association’s planned expansion of the cooperative’s cheese processing plant.

Dairy Research, Teaching & Consumer Education
The 2012 Legislative approval of a Governor appointed Dairy Authority Board has fostered cooperation between the University of Minnesota, MnSCU, and the dairy industry leading to a recommendation to replace the existing 120-cow dairy facility on the St. Paul campus with a new state-of-the-art 300-cow dairy research, teaching, and consumer education facility on the St. Paul Campus of the University of Minnesota. The new facility will enhance research capabilities and improve productivity and profitability for Minnesota dairies, and will prepare the next generation of dairy operators and teachers for business success using environmentally sound practices, improved animal care and enhanced product quality.

- We support the estimated $28.6 million dollar design and construction for a new state-of-the-art 300-cow Dairy Research, Teaching and Consumer Education Center at the University of Minnesota St. Paul campus.

- We support legislative approval of general obligation bond financing (approx. $21 million) with the University of Minnesota Board of Regents to build the Center, along with matching industry and dairy farmer investments of at least $15 million.

- We also urge the Legislature to increase support for the University of Minnesota – Morris’ premier organic dairy facility that will complement the new Dairy Research, Teaching and Consumer Education Center on the St. Paul Campus.

Safer Roads
Employment opportunities in rural agricultural communities often attract a high population of undocumented Minnesota residents who cannot currently receive a driver’s license from the State of Minnesota. The privilege of a license to drive legally would allow undocumented Minnesota residents to have a safe and legal means of transportation for employment, emergency, and other purposes that make for safer communities.

- We support legislation requiring the State of Minnesota to offer a provisional driver’s license to undocumented Minnesota residents when those applicants demonstrate they have automotive and personal injury liability insurance and meet minimum safety or driver training standards.
Our future depends on YOU to be a Champion for Dairy. Your community outreach to help others understand the importance of a growing and vibrant dairy industry in Minnesota is critical to this pursuit.

Commit to These Activation Ideas

- Present Path Forward key ideas and show the video at your Township Board, County Board, City Council, Rotary Club, Chamber of Commerce, or other civic organization meeting.
- Meet with local government officials to help them understand how the dairy industry is an important contributor of your community and state.
- Post the video to your website or Facebook page. Publicize this in your newsletter or in other communications.
- Use it in your employee training or as part of your customer outreach.

Take a Thumb Drive with the Following Resources

- Customizable Path Forward presentation.
- Path Forward Video, featuring testimonials from key Minnesota leaders.
- Talking Points.
- Leave-behind handout.
- Midwest Dairy-developed communication and training resources.